

rufous brown; rest of the upper surface brownish, with a dark stripe down the centre of each feather; side of face, throat, and chest cobalt-blue; rest of the under surface sandy or ochraceous buff.

Female. Similar to the male in general tone of plumage, except in the region of the throat, which is whitish or light buff instead of blue.

Dimensions in inches:—

Male. Length 5, wing 1·43, tail 2·9, bill 0·3, tarsus 0·6.

Female. Length 3·9, wing 1·4, tail 1·95, bill 0·3, tarsus 0·6.

Dimensions of *S. malacurus*:—

Male. Length 7·5, wing 1·6, tail 4·75, bill 0·35, tarsus 0·82.

Regarding the new species, Mr. Carter writes:—"I have seen three birds on only two occasions, and at the same place, namely, a stony ridge covered with dead scrub, matted with creepers, about 100 yards from a mangrove-creek (salt water), where I shot a male and a female on the 14th April, 1898. Almost in the same bush I shot another pair on the 8th December following. The birds creep about without flying, uttering a shrill trill or chirp, sharper than the note of a *Malurus*, and something like that of a cricket."

XXXIV.—Notes on the Birds of North-west Fohkien.

By J. D. D. LA TOUCHE, C.M.Z.S.

[Continued from p. 210.]

51. SILVIPARUS MODESTUS Burt.

Examples of this bird were obtained by our collectors at Kuatun in October 1896. We found it in April and May 1898, in the forest on the top of Mount David, where it no doubt breeds.

The testes of two males, shot on 11th April, 1898, were very large. The stomachs of some specimens contained caterpillars, seeds, and what appeared to be vegetable matter of some kind.

♂. Iris dark brown; bill livid plumbeous with dark tip;

legs purplish plumbeous. Total length: ♂, 3·9 and 4 inches; ♀, 3·8 inches.

52. PARUS MINOR T. & S.

Common in North-west Fohkien, whence we have not as yet procured *P. cinereus*, a species not uncommon at Foochow.

A nest-pad and nine eggs were taken by our collectors at Kuatun on the 21st April, 1897. The pad has a foundation of moss, fine grass, and hair, over which are black (pig's?) bristles and brown fibre mixed with moss. The upper part of the pad is made of animal fur and hair, with two or three downy feathers and a little moss added. The eggs are white, speckled or spotted with two shades of light red. Five of the eggs have large spots, one has specks and large spots, one or two have small spots, and one is very finely speckled. Seven of the eggs average $0\cdot68 \times 0\cdot50$ inch; the largest of these is $0\cdot70 \times 0\cdot50$ inch, the smallest $0\cdot67 \times 0\cdot49$. Of these seven eggs, four are somewhat pyriform ovate, two are ovate, and one is a long oval.

53. PARUS VENUSTULUS Swinhoe.

Common in North-west Fohkien. A nest-pad and three eggs were taken by our collectors at Kuatun on the 1st June, 1896.

Two of the eggs are nearly oval in shape and measure $0\cdot66 \times 0\cdot50$ inch and $0\cdot65 \times 0\cdot50$ inch. They are white, with specks and small spots of a dark shade of "light red" over reddish-lilac spots. One of the eggs has a rough ring round the large end.

54. PARUS PEKINENSIS David.

While we were at Kuatun, this small Tit was to be met with in pairs in the woods above the village from about 4500 feet to nearly 6000 feet. It was, I have no doubt, breeding in a pine-wood near the top of Mount David. Our collectors shot it in winter in a valley near Kuatun.

In 'Les Oiseaux de la Chine' mention is made of the extreme tameness of this bird, Père David saying that even if fired at it will not fly away. I was told a bird-story at

Kuatun which, if true, further testifies to the fearlessness of our Chinese Coal-Tit. The story, as related before me by Kuang Liang, one of our best Kuatun hunters, is as follows:—Kuang Liang was watching one day a *Parus pekinensis* in a wood, when the bird flew down and perched on his gun, then fluttered about his game-bag, apparently trying to get in! The man who told me this was quite in earnest and did not in the least appear to be lying. When one considers the quiet ways of a native hunter, and that the time was the height of the nesting-season, the story does not appear quite incredible, and the suggestion of one of our Foochow men, that the bird was perhaps anxious to get some cotton-wool for its nest, perhaps explains its extraordinary behaviour.

The soft parts of specimens shot at Kuatun are: iris dark brown; bill blackish; legs dark leaden blue.

55. MACHLOLOPHUS REX David.

This handsome Tit is common in the mountains about Kuatun, descending in winter to the banks of the River Min, where our men shot some in December 1895. It had already paired when we arrived at Kuatun (29th March). It frequents woods and clearings alike, and we often saw it mixing with flocks of other small birds. This Tit is by no means a shy bird, and a fine male, which had no doubt a nest in the vicinity, used often to show itself on the bare branches of the magnolias that grew by the village. One of its spring calls is very loud and sounds like "kec quick-quick;" but, like other Tits, it has a variety of notes.

The soft parts of specimens collected are:—Iris dark brown; bill blackish brown; legs dark leaden blue. Total length: ♂, 6 inches; ♀, 5.55 inches.

I was told that the nest is built in holes in the ground, as well as in hollow trees. We have three clutches, all from Kuatun: one obtained on the 24th April, 1897, comprising three eggs; one of five eggs collected in the same year by the natives; and one of six eggs obtained on the 4th May, 1898. The third nest was taken from a hole in a tree. The female was brought to me alive with the nest and eggs. She bit

fiercely when I was untying the string that bound her legs, and even when released pecked hard at my fingers before finally flying away.

The nest of this Tit is a mere pad; the one procured last is chiefly made of fir-flower scales, with the addition of a few bits of fur, a little moss, coir, black (pig's?) bristles, and a little bit of a snake's slough. Five of the eggs are of a rounded ovate, the sixth is not so broad. The ground-colour is pure white; the markings consist of spots and specks of two shades of red, one of which is very dark, over paler underlying spots of reddish lilac. There is little or no gloss. These eggs measure 0.70×0.56 , 0.70×0.52 , 0.69×0.56 , 0.69×0.54 , 0.67×0.55 , and 0.67×0.53 inch.

56. *ACREDULA CONCINNA* (Gould).

Noticed in pairs at Kuatun during April. Towards the end of our stay, one of the hunters brought us an empty nest which he said was that of this species. He had found young birds in it some time previously, and had seen the old birds feeding them, but when he revisited the nest it was empty. This nest is a strong ball of bright-coloured soft moss lined with feathers, and has a small hole as an entrance.

57. *SITTA SINENSIS* J. Verreaux.

There appear to be two races of the Chinese Nuthatch, a lowland and a mountain form.

The lowland form has a weak bill and small legs and feet, with a hind claw not exceeding 0.3 inch. The throat and cheeks are more or less white, the underparts are pure reddish, and the chestnut of the under tail-coverts is pale.

Two males from Kienyang and Pucheng, in North-west Fohkien, average: bill from gape 0.76 inch, wing 2.96, tarsus 0.70, hind toe 0.48, hind claw 0.28.

Three females from Wu Yi Shan and Pucheng average: bill from gape 0.75 inch, wing 2.88, tarsus 0.70, hind toe 0.45, hind claw 0.27.

I am indebted to Mr. Rickett for the three examples from Pucheng, all of which are beautiful skins.

The birds from the lower hills of North-west Fohkien are

of this race, and the male type of *S. sinensis* Verreaux (a Kiukiang bird), and other examples in the Paris Museum from Chekiang and Kiangsi, also belong to it.

The mountain form is a larger bird with much larger bill and stronger legs, and with a hind claw of 0·3 to 0·35 inch.

The flanks are grey in newly-moulted autumn birds, this grey tint pervading the rest of the underparts in breeding birds. There is no white on the cheeks and throat, and the chestnut of the under tail-coverts is very dark.

Ten males from Kuatun average: bill from gape 0·83 inch, wing 3, tarsus 0·75, hind toe 0·53, hind claw 0·32.

Three females from Kuatun average: bill from gape 0·82 inch, wing 2·9, tarsus 0·73, hind toe 0·51, hind claw 0·32.

All my Kuatun Nuthatches belong to this race, and the male type of *S. sinensis* Verreaux, from Moupin, specimens from Yerkalo, and some from Chentu in the Paris Museum can also be referred to it. There are other specimens in the Paris Museum, also from Chentu, which appear to be intermediate, but the bad state of the skins prevented a satisfactory examination. Should these two races of *S. sinensis* ultimately prove to be as distinct as they now seem to be, I would propose to retain the name of *S. sinensis* Verreaux for the lowland form, and to distinguish the mountain or grey-flanked bird as *S. montium*.

The Chinese mountain Nuthatch is common in the woods about Kuatun. We took there on the 19th April a clutch of five eggs from a hole in a dead tree-stump about 35 feet high, the hole being near the top of the tree. This stump stood on the edge of a clearing in a pine-wood. The eggs were much incubated, the young being already covered with down. The shape of these eggs is ovate. They are white, spotted with red over well-marked underlying reddish-violet spots. The spots are more numerous about the large end of the eggs. The surface is somewhat glossy. They measure 0·74 × 0·55 (two), 0·73 × 0·55 (two), and 0·70 × 0·55 inch.

58. LIOTHRIX LUTEA (Scop.).

This pretty bird is abundant about Kuatun and breeds

there in numbers. We found the nest in dwarf bamboo jungle somewhat above the village, in the tea-plantations of the upper valley, and in the high forest on Mount David, where they swarmed. Three nests were taken on tea-plants, and many others on the dwarf bamboos of the high forest, while one was found on a tree in this forest about 15 feet from the ground. The nest is always slung on the twigs of the plant it is built on, generally at no great height from the ground—2 to 4 feet as a rule.

I saw a newly-built, but as yet empty, nest on the 15th April in the forest on Mount David, and on the thorny bushes that cover the very top of the mountain one or two old nests. The first nest with eggs (incubated) was found on 5th May, and others, nearly all with slightly incubated eggs, were taken on the 8th, 9th, 15th, and 16th May.

The nests are more or less deep cups, made of bamboo-leaves and sword-grass blades, bound exteriorly and wrapped in soft moss.

The lining of the nests found in the tea-fields was composed of fine brown grass-stems, coir, and fine roots, one having besides a few black fern-stems added. The forest nests are generally lined with coarse shining black tendrils or fern-stems. One of these had been so built that it was sheltered by two bamboo-leaves that formed a waterproof cover to it.

The average measurements of eleven nests are:—Inner diameter $2\frac{1}{4} \times 2\frac{1}{2}$ inches, some having this as small as $2\frac{1}{4}$ inches and $2 \times 2\frac{1}{2}$ inches. The depth of the egg-cavity varies from $1\frac{3}{4}$ to $2\frac{1}{2}$ inches. The average outer depth is about 3 inches, but this in one shallow nest is only 2 inches, while several show an outer depth of $3\frac{1}{2}$ inches. The outer diameter varies from $3\frac{1}{2} \times 4$ to $4\frac{1}{2} \times 5$ inches. Very few nests are absolutely round.

The number of eggs in a clutch is also irregular, varying from two to four, three eggs being, however, the usual number. The shape of the eggs varies from a broad to an elongated ovate. The ground-colour is a pale greenish blue, sometimes greenish white. The markings are more or less

irregular spots and blotches of more or less deep burnt sienna and lilac over underlying paler lilac spots and blotches, and are usually disposed about the large end of the egg. The natives state that the pale eggs are those of young birds, and that the old birds destroy their eggs if they notice that the nest has been discovered. The younger birds are believed not to do this. There is much variation in size, and short broad eggs are more heavily marked than the large elongated ones. The eggs of a clutch are all of the same type.

Thirty-one eggs of *Liothrix lutea* collected at Kuatun vary in length from 0.75 to 0.92 inch, and in breadth from 0.58 to 0.66. The three eggs of the longest clutch measure each 0.92 \times 0.64 inch. The three eggs of the shortest clutch measure 0.75 \times 0.61, 0.76 \times 0.60, and 0.76 \times 0.59 inch. The broadest egg measures 0.86 \times 0.66 inch, and the narrowest eggs, a clutch of two, measure 0.86 \times 0.58 and 0.80 \times 0.58 inch.

59. STAPHIDIA TORQUEOLA (Swinhoe).

This is about the commonest bird in the Kuatun Mountains. During April, large flocks, often joined by parties of *Yuhina pallida* and other small birds, were daily seen by us, and nearly every day a flock used to pass under our windows on its way up the mountain. The first indication we had of their approach was their loud twittering, and the birds would be seen on the bamboos below the village, whence they would fly down to the tea-bushes of the small plantation under the main path and gradually swarm over the neighbouring bushes and trees. They explored the trees busily, tearing off bits of bark and lichen, and held on to the branches like Titmice. When they had finished with the tea-field and the trees, they passed up the hill. Long after these birds had mated, large flocks were occasionally met with. This was generally during bad weather. The spring call is loud and trisyllabic, something like "chichi-wheat."

A live bird, brought to us with a nest, on being released and placed on a window-sill, did not fly away at once, but

remained for some seconds quietly drinking some water that had accumulated there, then flitted its tail about and finally flew down into the valley.

The soft parts of this species are:—Iris dull dark crimson; bill dark livid pinkish brown; legs dull orange; feet tinged with brown.

Like *S. castaneiceps* (see Ibis, 1895, p. 219), this bird builds its nest in holes of earthbanks by the mountain-paths, hollows in the ground on a bamboo-planted hillside being also favourite situations.

Nests were reported to us as being built early in April, and on the 14th April I examined three of them in the forest. All three were in holes in the bank by the path. Two were empty as yet, while the third contained three eggs. The parent birds of the third nest were near with nesting-materials, and the hunters told me that the birds kept adding to their nests until the full clutch was laid. On the 17th April I took a nest, with five eggs much incubated, from a hole in a bank on a hillside sparsely planted with bamboos.

About eighteen nests were collected during our stay, the last, taken on the 19th May, containing fresh eggs. From the 14th April, however, to the above date, the degree of incubation of the eggs taken varied greatly, fresh and incubated eggs being often found on the same day. The nest consists of a more or less stiff cup, composed of very soft fibre, fine grass-stems or fine grass-roots, lined with coir, very fine curly black fibre or moss-roots, built within a rough outer cup of moss, pine-needles, bamboo-leaves, &c., which more or less fills up the cavity sheltering the nest, and which is therefore of rather irregular shape and size, according to the space to be filled up. The depth of the inner cup is $1\frac{1}{2}$ inch, sometimes a little over, seldom less, its diameter varying from 2 to $2\frac{1}{2}$ inches. A common diameter for nests that are not quite round is $2\frac{1}{4} \times 2\frac{1}{2}$ inches.

The full clutch consists of five eggs, but once a nest with six eggs was brought to me. The colour is a bluish china white, more or less thickly speckled or finely spotted with sepia-brown of several shades over light and dark grey

underlying spots. Some clutches are very finely speckled. In one clutch collected by our men in 1897 there is a very broad ring, amounting to a cap in two of the eggs, of confluent spots and blotches. In most of the clutches the markings are most numerous about the large end of the egg, where they form a generally rough, but sometimes regular, ring. In a few cases there is a cap, and finely-speckled eggs have often a few large spots or sometimes blotches about the large end. The eggs of the same clutch are not always of the same type, there being often one or more eggs the markings of which do not resemble those of the others.

The shape is very variable, ranging from a regular ovate to a broad oval. A broad ovate with a broad rounded apex is the most usual shape. The texture is very finely shagreened, and the surface is glossy. Eighty-eight eggs average 0.73×0.54 inch; this does not include the eggs of an abnormally narrow clutch which measure 0.67×0.50 , 0.68×0.51 , 0.70×0.51 , and 0.71×0.51 inch. The longest eggs (two) measure 0.76×0.56 inch, and the shortest (one) 0.65×0.55 inch. The abnormal clutch excepted, the variation in breadth is from 0.52 (one egg only) to 0.59 inch. The most common length is between 0.68 and 0.73 inch, and the most common breadth lies between 0.55 and 0.57 inch.

60. *PTERERYTHRUS ÆRILATUS* Tickell.

This handsome bird is common in the forests about Kuatun. I am sorry to say that I only saw it once, but I heard it several times. The call is a loud monotonous chirrup, something like "tiup-tiup-tiup-tiuptiup." The attitude when perched is very shrike-like. The food appears to consist of beetles, seeds, and caterpillars.

The soft parts of specimens shot at Kuatun are:—Iris black, with grey outer ring; upper mandible blue-black; lower mandible leaden blue; legs pinkish flesh; claws more or less dark reddish grey. Total length: ♂, 6.6, 6.7, 7 inches; ♀, 6.8, 6.9 inches.

Our collector took a nest of this Shrike-Tit on the 25th April, 1897. It was on a tree a short way above the village, and was slung between the twigs of a small fork at the extremity of a branch.

This nest is a shallow cup of triangular outer shape, made of fine tendrils or fine roots, with an outer covering of long silky moss and cocoon (or floss) silk of two or three shades of yellow. One or two little bits of lichen adhere to the base. The moss and silk are thickly wound round the twigs holding the nest, and round the sides of the cup, the base of which is of more or less open work, like the nests of *Chibia hottentota*, with only a slight wrap of moss under it. The inner depth is between $1\frac{1}{2}$ and $1\frac{3}{4}$ inches. The inner diameter at the rim is regular, about $2\frac{1}{2} \times 3 \times 3\frac{1}{2}$ inches; under the edge of the nest it is 3 inches. The outer diameter at the rim is about $4\frac{1}{2} \times 5$ inches.

Our men told us that there were four or five eggs in this nest, but that two or three were jerked out when the nest was taken. The two remaining eggs are slightly damaged. One of these, in Mr. Rickett's collection, is ovate, white, lightly speckled with dark and light brown over a few underlying grey spots. The markings form a narrow ring round the large end. The other egg is also ovate in shape, measuring 0.90×0.66 inch. It resembles Rickett's specimen, but it is more thickly speckled at the large end, the markings forming a thick zone, almost a cap. The texture of the egg is not very smooth when seen through a lens, but the surface is much polished.

61. ALLOTRIUS PALLIDUS David.

This bird is probably a resident in the mountains of West Fohkien. We have a few examples shot at Kuatun in spring and autumn.

The male has the upper wing-coverts and the innermost secondaries washed with light bluish grey, and the outer secondaries and the primaries edged with the same. The side rectrices are also edged with grey, and the central rectrices are washed with the same colour. The throat and

breast are of a much purer grey than in the female. Young birds have the tail and wings (primaries excepted) washed and edged with green, and have besides a good deal of green on the head and neck. The very young birds have probably the head and neck quite green.

The soft parts of the only bird (a female) procured during our visit to Kuatun are as follows:—Iris dark brown; upper mandible blackish; lower mandible leaden blue; legs greyish flesh. Total length 4.90 inches.

62. PNOËPYGA PUSILLA Hodgs.

This Wren is common about Kuatun. It is, however, seldom seen, hiding in the undergrowth or about the rocks on the banks of the mountain-torrents, whence its curious loud sibilant whistle, consisting of two notes, the first ascending, the next descending, may be heard. Our men told us that the call of the “U Kwei” (Black Devil), as this innocent little bird is called by the natives, is a sure sign of fine weather. We procured specimens on Mount David as high as 6000 feet. One example shot on the 12th April, 1898, has the underparts fulvous. It is a male, with the soft parts coloured as follows:—Iris dark brown; upper mandible blackish; lower mandible dark livid grey; legs greyish brown. Total length 3.6 inches. The stomach contained a tiny centipede and remains of small insects. Another male, with normal underparts, shot on the 19th April, 1898, measured in total length 3.65 inches. Its soft parts are similarly coloured, except that the whole bill is purplish black and the claws are paler. The gape is noted on the label as being flesh-coloured.

Three nests were discovered during our stay at Kuatun. One was reported to be building on the 14th April, but on a subsequent visit it was found to have been deserted. The second was shown to me on the 18th April. It was in a dark rocky nook near the stream below the village, and was built about 4 ft. from the ground on the perpendicular face of a rock. The aperture faced a little dark cave under the rocks a yard or two off. The brambles and bushes growing

at the base of the steep wooded slope of the mountain made up the third side of this quiet corner. The hen bird was sitting when I approached the nest, and flew down to the little cave, where she hopped about under the rocks till she fell a victim to a badly-calculated shot which spoilt her as a specimen. There were three eggs in the nest, which I did not take till next day, when I found that they were on the point of hatching. On this second visit I found the male sitting. He behaved just like the female, but soon slipped away. I waited some time for his return, but as he did not appear I took the nest. On crossing the stream again to pick some flowers I found the male quietly hopping about on the ground under the rock where the nest had been, and secured him without damage.

This nest appears to have been made much in the same way as that described by Mr. Stuart Baker (*Ibis*, 1896, p. 322). It is a domed nest, made exteriorly of moss twined into the living moss that hung on the rock, a bag with a side-entrance having thus been formed. The inner part of the nest is of coir-fibre and is lined with fine brown grass-stems. As stated above, the aperture faced the cave, the sides being parallel with the rock. The top of the nest overlaps the entrance, and the structure was built over an old nest, the whole forming a mass eleven inches in length. The aperture is 2 inches high by $1\frac{1}{2}$ inch broad. The distance from the base of the entrance to the base of the nest is 4 inches. The height inside is $3\frac{1}{2}$ inches; the inner diameter 3 inches; and the depth of the egg-cavity is about $1\frac{1}{2}$ inch.

The third nest was found some distance above the village, among the moss and grass covering the bank of a stream. This nest was just above the water, and was fastened to the living moss and grass growing *on the side of the bank*. It is an oblong domed structure, with the top of the nest overlapping the aperture, which faced up stream, and it is exteriorly made of moss and fine roots. The inner part is of fine brown grass-stems or coir-fibre and very fine roots. The aperture is 2 inches high by $1\frac{1}{2}$ inch wide. The outer

measurements are: length about 7 inches, depth (front to back) 4, width 3. The inner measurements are: height about 4 inches, diameter 3. The egg-cavity is about 2 inches deep. There were four white eggs, quite fresh. The hunter who was with me caught the female on the nest, but, as in doing so he had pulled out several quills of one wing, I released her.

Another nest with two incubated eggs was taken by our men on the 20th May, 1896. So far as I could make out, it was placed in the mossy crevice of a rock. This nest, which is perhaps only an inner cup, is a deep narrow cup made of fine grass-stems or fibre, a thick curl of short stiff grey bristles, and fine roots with a few dry leaves and skeleton leaves worked into the nest. There is a little moss about the edge, and the lining is of fine fibre. The inner diameter of this nest is $1\frac{1}{2} \times 3$ inches, the outer diameter $2\frac{1}{2} \times 4\frac{3}{4}$; the depth of the egg-cavity 2 inches, the outer depth $3\frac{3}{4}$ inches.

All the eggs taken with these nests are pure white, very fragile, and glossless. The shape of the four eggs taken on the 24th April, 1898, is nearly oval (or ovate with very round and broad apex). They measure 0.70×0.52 (two), 0.68×0.54 , and 0.67×0.53 .

63. ELACHURA PUNCTATA (Blyth).

Anorthura, sp. inc., Slater, Ibis, 1897, p. 174.

This pretty Wren is not common at Kuatun. Besides the headless example recorded by the Rev. H. H. Slater, two males were collected near Kuatun on 27th and 28th April, 1897. We did not obtain any on our trip, but one was seen by the hunters creeping about the underwood near the stream a short way beyond the village.

64. MOTACILLA LEUCOPSIS Gould.

This Wagtail breeds in May on the hills near Foochow (alt. 1000 to 2000 feet), and also at Kuatun (3000 to 4000 feet). The nest is placed on the roofs of houses, among the thatch or under a tile, in holes of walls, and on rafters in open sheds. The nest is a large cup composed of some

of the following materials:—straw, grasses, moss, dead and skeleton leaves, feathers, and coir, and is thickly lined with wool or hair.

A nest taken in Peling (near Foochow) on the 13th May, 1897, measures: inner diameter about $3\frac{1}{2}$ inches, inner depth $1\frac{1}{4}$; outer diameter 7, outer depth $2\frac{1}{4}$. It contained three fresh eggs. Another, taken in the same locality on the 16th May, 1897, had two fresh eggs. Both these clutches were, of course, incomplete. A nest was taken at Kuatun on the 15th May, 1897, with five fresh eggs, and one at Upper Kuatun on the 5th May, 1898, with four incubated eggs. The inner diameter of this latter nest is a little over $2\frac{3}{4}$ inches; the inner depth is 2 inches. Two of the eggs, taken in Peling on the 13th May, 1897, are greyish white, so thickly speckled and streaked with pale brown over grey underlying marks as almost to conceal the ground-colour; their shape is a broad ovate. The third egg is ovate, attenuated at both ends, and its markings are darker and not so numerous. These eggs measure 0.80×0.60 (two) and 0.78×0.60 inch. The clutch obtained at Kuatun on the 5th May, 1898, has a very different appearance. The ground-colour is also greyish white, but the marks are of a darker brown and of a violet-grey. The spots are fewer in number and larger, and all four eggs have a cap, which in one egg is very dark. These four eggs are ovate in shape and measure 0.80×0.59 , 0.80×0.58 , 0.78×0.60 , and 0.78×0.59 inch.

65. *ANTHUS MACULATUS* (Hodgs.).

Specimens were obtained at Kuatun on this and on previous trips. It no doubt winters in the lower valleys.

66. *ANTHUS RICHARDI* Vicill.

We have two skins of this Pipit, labelled Kuatun, 1st and 5th May, 1897.

67. *LIMONIDROMUS INDICUS* (Gm.).

A single specimen was shot in a pine-wood in the valley below Kuatun on the 20th April, 1898. It is a male: iris brown; upper mandible blackish; lower mandible pinkish,

with dark tip; legs dark flesh. Total length 6.85 inches. Wang Wang shot one at Swatow on the 25th April, 1887. We have not as yet noticed this bird at Foochow.

68. *OREOCORYS SYLVANUS* (Hodgs.).

Corydalla kiangsinensis Dav. & Oust. Oiseaux de la Chine, p. 311, pl. xxxvii.

Rhabdochlamys dejeani Oust. Bull. Mus. Hist. Nat. 1897, no. 6, p. 208.

The comparison of several specimens of *O. sylvanus* shot in Fohkien with the type of *C. kiangsinensis* shows the latter to be a very dark example of the former species. It was shot in August and is probably a young bird. There is also no doubt that *Rh. dejeani* is the same, as examples of this bird cannot be distinguished from our specimens of *O. sylvanus*. *O. sylvanus* therefore proves to be somewhat widely distributed in China. It is doubtless a resident on the hills of Fohkien, and it is not uncommon on the grasslands above Kuatun.

♂. Foochow, 14.2.96. Iris dark brown; upper mandible livid purple; lower mandible pinkish flesh, with dark point; mouth and gape yellow; legs light flesh. Total length 7.25 inches. The stomach contained a grasshopper and small insects.

♂, Kuatun, 1.4.98. Iris dark brown; upper mandible dark livid brown; lower mandible pinkish, with dark point, its base and the gape yellow; legs flesh. Total length 7.55 inches.

69. *PYCNONOTUS SINENSIS* (Gm.).

We obtained at Kuatun three examples of this lowland species. It is, however, a rare bird up there, only a few coming up from the lowlands for the breeding-season. One of the specimens obtained on this trip has the white of the head divided down the centre of the occiput by a single black feather.

70. *PYCNONOTUS XANTHORRHOUS* Anderson.

A few examples were shot by our men near Shaowufu in December, 1895.

71. *PYCNONOTUS ATRICAPILLUS* (Vieill.).

This Bulbul appears to straggle as far north as North-west Fohkien. I have a specimen from there dated October 1896.

72. *HEMIXUS CANIPENNIS* Seeböhm.

This bird is common among the wooded hills of Central and North-west Fohkien. It is abundant about Kuatun. We noticed small flocks, as well as paired birds, at the beginning of April, and on the 5th May I saw a bird carrying nesting-materials. I was unable to find any nests during our stay, but a nest and eggs, taken in 1897, said to belong to this bird, were sold to me on our arrival at Kuatun.

The nest is a cup, composed chiefly of soft moss. The inner diameter is 2·8 inches, the depth of cup 1·6, the outer diameter 3·8, and the outer depth 2·2*. The eggs, three in number, are very beautiful. Two are exactly ovate, and one is slightly elongated ovate. The ground-colour is a red-pink, or "old pink," and the markings consist of spots and bold blotches of pale and dark carmine over violet underlying blotches, with short hair-lines of dark carmine over the carmine blotches. One egg has an irregular ring round the large end, and one has the crimson blotches rather paler, these forming a cap, which is prolonged in a broad irregular blotch extending on one side over its whole length. They measure 0·98 × 0·65, 0·96 × 0·68, and 0·95 × 0·66 inch.

73. *SPIZIXUS SEMITORQUES* Swinhoe.

We saw a flock of this species feeding on a tree near the river on the 23rd March, 1898, and found it common at Wu Yi Shan. Three shot on the 23rd March had their stomachs crammed with green-stuff—seeds or buds of the tree they had been feeding on. I do not think that this Bulbul occurs at Kuatun.

* I am indebted to the officers of the British Museum for these measurements, as well as for those of the nests of *Hypsipetes leucocephalus* and *Cryptolopha sinensis* obtained in 1898 at Kuatun, these nests having been sent, unmeasured, to London.

74. IOLE HOLTII (Swinhoe).

This Bulbul is very common about Kuatun. It was breeding, I think, during the latter part of our stay, but we could not find the nest. The natives say that it is a late breeder.

75. HYPSPETES LEUCOCEPHALUS (Gm.).

This bird comes to the Kuatun Mountains for the breeding-season. In 1898 it first appeared towards the latter end of April. A pair settled about the village, and other couples were often met with in the neighbourhood, while flocks would be seen flying swiftly high overhead from one mountain to another. Our collectors brought us two nests, each with three eggs, in 1896. One nest was taken at the end of May and the other at the beginning of June. The latter nest is a compact and fairly strong shallow cup, made of strips of bark, coarse grass, and moss, on a foundation of moss. It is lined with pine-needles and a strip or two of sword-grass. The inner diameter is $2\frac{3}{4} \times 3$ inches, the inner depth about $1\frac{1}{4}$, the outer diameter $4\frac{1}{2} \times 5$, and the outer depth about 2. The eggs of this nest are of elongated ovate shape. The ground-colour is a very pale mauve, and they are spotted all over with very dark brownish carmine over dark and light lavender-grey. The spots are more numerous about the large end. The texture is somewhat glossy. These eggs measure 1.20×0.73 , 1.15×0.71 , and 1.15×0.70 inch. The eggs from the other nest are ovate. Both clutches are very large editions of the eggs of *Pycnonotus sinensis*. Another nest with three eggs, taken in 1897, was sold to me on our arrival at Kuatun as the nest and eggs of *H. leucocephalus*.

These eggs are so different from those obtained by our men in 1896 that, did I not know the Kuatun men and our collectors to be so careful in their statements, there would be reason to think that a mistake had been made somewhere. The ground-colour is *pink*. The spots are large and few in number, and are chiefly disposed about the large end; they are of the same brownish carmine as in the first two clutches,

and the underlying spots are also of a lavender-grey. These eggs are a large pink edition of the eggs of *H. nigerrimus* obtained in North Formosa and described in 'The Ibis' (1898, p. 365). In shape they are a slightly elongated ovate, and they measure 1.13×0.75 (two) and 1.11×0.77 inch.

The nest has an inner diameter of 2.90 inches, with an inner depth of 1.7; the outer diameter is 4 inches, and the outer depth 2.

76. YUHINA PALLIDA La Touche.

The soft parts in this species are:—Iris dark crimson or brown; upper mandible blackish; lower mandible and sides of base of upper mandible dark vermilion; mouth and tongue red, the tongue deeply forked and brush-tipped; legs dull orange, the feet tinged with dark grey. Total length: ♂, 4.9 and 4.7 inches; ♀, 4.7 inches.

This bird is extremely common about the Kuantun Mountains during spring, summer, and autumn. It frequents the valleys and the planted hill-sides, and is found in the forests as high as the summit of Mount David, where we met with it paired in May. I fancy that during the cold weather it must either go south or retire to the lower valleys of the high ranges of Western Fohkien. During the early part of April, and even occasionally after that, we saw large flocks in the valleys or working their way up the mountains. They often joined a flock of *Staphidia torqueola*, other small birds, such as *Cryptolopha ricketti* and Willow-Warblers, being also found in their company. I have seen these birds feeding on the ground at the foot of trees. Like many other small birds of sociable habits, they appear to be distressed at the loss of their companions, as one that I shot out of a flock on the 31st March was followed to the ground by another, screaming and showing great grief.

From about the 11th April we saw this *Yuhina* in pairs, and the song of the male was to be heard everywhere. The song is a peculiar whistle, very loud, each note very distinct and slow. It consists of five or six notes, the first two being often repeated hesitatingly before the songster ventures on

the next notes. The song gives one the idea of some one practising a scale on some musical instrument. The last note has a deep sound like that of the bass string of a violoncello. The nest, like that of *Yuhina nigrimentum* described by Mr. Stuart Baker in 'The Ibis' for 1895 (p. 221), is a cradle suspended generally under the moss-grown branch of a tree, sometimes on a palm-tree: I saw one slung under and attached to the bamboo-thatch under the eaves of a shed for storing bamboo-fibre or -skin. The day before we left some tea-pickers brought us two nests with young, which they said they had found suspended from twigs of tea-plants. The bird is so shy and wary at the nest that to obtain the parent birds with the eggs is a matter of great difficulty. If the nest be only touched the bird will forsake it. Thus the nests found by the native hunters proved on subsequent visits to have been deserted. The first shown to me was slung under the moss-covered branch of a small tree that grew out of the perpendicular face of a rock, just over a pool in the torrent below Kuatun. This nest contained four eggs—the full clutch, no doubt. When we took it, on the 2nd May, it had been deserted for some days. Another nest that I saw was slung under the lowest branch of a tree, towards the extremity of the branch, and was about 15 feet from the ground. This tree stood on a hill-slope, in the midst of a lightly-planted bamboo-grove. An old nest was also shown to me on a palm-tree (*Chamærops excelsa*), among the coir-fibre at the base of the leaf-stems. These nests, together with that above mentioned, found under the eaves of a shed, are the only nests I saw *in situ*. Only the first-mentioned nest contained eggs. The remains of a nest, with the parent bird and fragments of the eggs, were brought to me on the 2nd May by Chunkai. This nest was placed in a very difficult position, and while taking it the branch broke and all the eggs were smashed.

Our collectors were more lucky on their previous expeditions. In 1896 they brought one nest with four eggs and the parent bird, and in 1897 two nests with one and three eggs.

The nests of *Yuhina pallida* that I have seen are all of the same build and composed of the same materials. They are cradles of moss and moss-roots, with an inner cup or lining of coir or other fibre and fine rootlets. The nest with eggs taken on the 2nd May, 1898, is a stout little cradle of moss, with a lining of coir-fibre and fine roots. A tail of moss and small roots hangs from its base. The entrance is at either end of the cradle and is 1 inch in diameter. The egg-cavity is about $1\frac{1}{2}$ inch deep, with a diameter of about 2 inches; the outer diameter is 4 inches longitudinally and 3 inches in width; the outer depth of the nest, hanging moss excluded, is about 2 inches.

The eggs of this nest are of a very pale and rather dull sea-green, speckled with pale brown over a few underlying violet spots. In two of the eggs the spots form a cap, the centre of the large end being lightly spotted, and the other two have an irregular ring. Other spots and very pale streaks are thinly distributed over the whole egg. The ground-colour of one of the eggs is much brighter than that of the others, and the spots are much better defined; it is the largest of the four. The shape of these eggs is ovate, inclining to oval, the apex of one egg in particular being very broad and round. They measure 0.68×0.50 , 0.66×0.50 , 0.64×0.50 , and 0.62×0.50 inch. The ground-colour of two of the eggs taken on the 20th May, 1896, has much faded. It was originally a light green, but it is now a dull light yellowish or brownish green. The markings on one egg consist of small lines and specks of light reddish brown distributed all over the egg; the specks on the other egg are darker. There is no trace of a cap or ring. The eggs are ovate in shape, and measure 0.64×0.48 and 0.62×0.48 inch. The eggs of the third clutch in my collection, taken on the 22nd May, 1897, have the ground-colour light bluish green, which appears very bright when the eggs are placed beside the other eggs just described. They are speckled or spotted, chiefly about the large end, with pale brown over underlying reddish-grey spots. In shape one is ovate, another rather broad ovate, and the third is very round

and globular. They measure 0.65×0.51 , 0.62×0.51 , and 0.60×0.51 inch. The texture of all these eggs is smooth and glossy, and, when seen through a lens, very finely shagreened.

77. *BUCHANGA LEUCOGENYS* Walden.

A pair seen on the 5th May at Kuatun.

78. *CHIBIA HOTTENTOTTA* (Linn.).

I have a specimen labelled Kuatun, 27th April, 1897, and another obtained in the same neighbourhood on the 30th September, 1896.

79. *CAMPOPHAGA MELANOPTERA* (Rüpp.).

We have no skins from Kuatun, but specimens were shot on the 5th May, 1896, in the Kienyang district.

80. *PERICROCOTUS GRISEIGULARIS* Gould.

This pretty Minivet is abundant from March to November in the Kuatun Mountains. One or two were shot in the village during our stay; they were in company with other small birds.

A young male, dated Kuatun, 17th September, 1896, has a few nestling-feathers on the head. These are light brownish grey, with subterminal dark border and white edge. A single feather on the shoulder has also these dark and light bars, and a feather of the upper tail-coverts has a black subterminal edge, with a yellowish-green tip. Thus in the nestling the head and upper back are barred with dark grey and white, and the green lower back, rump, and upper tail-coverts are barred with black and light yellowish green.

We have one nest of this species from Kuatun, taken by our collectors on the 8th May, 1897. It was placed on the branch of a pine-tree. It is a small cup, with thin sides, made of a kind of filiform lichen, a few pine-needles, and a kind of greenish flat lichen with finely scalloped edges, reddish brown underneath, with hairy black roots. The nest is completely plastered outside, and partly inside, with this latter material, only a bit or two of moss being added, and has in consequence a peculiar black-and-green appearance. It is bound and held together by cobwebs. The inner

diameter is about 2 inches, the outer diameter 3; the inner depth is about $1\frac{1}{4}$ inch, and the outer depth $1\frac{3}{4}$.

There were three eggs, very round or broad ovate in shape, one being nearly oval. They are of a pale greenish stone-colour, and have a broad ring of dark and light brown specks and round spots over larger and more irregularly-shaped underlying markings of dull brownish grey and blue or purplish grey of several shades. Other spots are sparsely distributed over the rest of the egg. In one of the eggs the ring is round the large end; in another it is round the small end, and the spots are smaller and fewer. The third egg I have no longer by me, but it resembles, so far as I can remember, the former of the two just described. These eggs measure 0.74×0.60 and 0.73×0.60 inch.

81. *PERICROCOTUS SPECIOSUS* Lath.

This appears to be the most uncommon of our Fohkien Minivets. Père David obtained or saw it at Kuatun, but as yet we have it only from the hills of Central Fohkien, where it would seem to be a resident species.

82. *PERICROCOTUS CINEREUS* Lafresn.

This Minivet passes through Fohkien on migration, but it is not common. We have specimens taken at Foochow in April, September, and October, and others from Kuatun dated 11th and 17th April, 1897.

83. *PERICROCOTUS CANTONENSIS* Swinhoe.

Our collectors shot specimens at Kuatun in September and October 1896. One of these, a male, dated 13th October, 1896, has the longest upper tail-coverts broadly edged with light yellowish green. The underparts are whiter than in Foochow specimens; the rest of the colouring resembles that of an autumn bird from Foochow in my collection.

84. *LANIUS LUCIONENSIS* Linn.

A pair was shot at Kuatun in May 1897, and we obtained an adult male on the 6th May, 1898. We also brought back two immature examples collected by the natives in 1897, probably during the autumn migration.

85. *LANIUS SUPERCILIOSUS* Lath.

Two adult males were shot at Kuatun on the 6th and 16th May, 1898.

86. *LANIUS TIGRINUS* Drapiez.

An adult male was shot by our collectors at Kuatun on the 11th May, 1897.

87. *ALSEONAX LATIROSTRIS* (Raffl.).

Shot at Kuatun in April and May 1897.

88. *HEMICHELIDON SIBIRICA* (Gm.).

This Flycatcher is very abundant in May on the Kuatun Mountains. Specimens were also shot there in September and October 1896.

89. *MUSCICAPA GRISEICTICA* (Swinh.).

One example from Kuatun.

90. *POLIOMYIAS LUTEOLA* (Pall.).

Common about Kuatun in April and May. We shot one on Mount David at an altitude of 5500 feet. It has also been obtained there in October by our collectors, and in Central Fohkien during November.

The occurrence of this bird at Foochow in November 1885 must have been exceptional, as we have not since then obtained or noticed it in that locality.

91. *TARSIGER CYANURUS* (Pall.).

Winters at Kuatun.

92. *SIPHIA BRUNNEATA* Slater.

This new species, which passes the summer at Kuatun, was, according to our men, very uncommon during their previous visits to these mountains. In 1898 it was apparently plentiful, and we obtained nine specimens. It arrives rather late, the 6th May being the date on which the first specimen was shot in 1898. The bad weather during the month of May prevented me from visiting a mountain near Kuatun, well covered with forest, where this bird was most abundant, but I obtained the following information from the native hunters and our collectors. They know the bird by the name of "Chi-o-hay," a name supposed to represent one

of its calls. It is a very shy bird, and keeps to the thickest bamboo-undergrowth in the forests. It is not found above 3500 feet. We heard one calling from the thick jungle on the forest-covered ridge facing the village, and on our way back from Kuatun we heard several singing in the woods by the path. It has, I believe, a variety of calls. Those which I noted down on the return journey are a slow whistle of four notes, "tootoo-titi," and another of six notes, "tütütütütiti." The hunters say that when the bird is aware of danger it changes these calls to one resembling its local name.

The colours of the soft parts in this Flycatcher are as follows:—Iris brown; upper mandible brown, paler at the tip, or blackish; gape, edge of upper mandible to beneath the nostril, and lower mandible yellowish or orange-flesh; legs pale pink. Total length, ♂ 6.10 to 6.60, ♀ 6.40 inches; wing, ♂ 3.10 to 3.22, ♀ 6.05 inches.

The plumage differs only in the greater or lesser amount of grey-brown on the breast. A few have the tertiaries tipped and edged with pale fulvous, these being probably young birds of the previous year. The under tail-coverts are sometimes nearly pure white, sometimes strongly tinged with pale fulvous.

93. *NILTAVA SUNDARA* Hodgson.

A few examples of this handsome Flycatcher have been obtained by our men at Kuatun. The only place, however, where they found it was in one particular spot on Mount David at about 5500 feet altitude. We obtained two males during our stay, particulars of which are as follows:—

♂, 11.4.98. Iris dark brown; bill black; legs dark purplish. Total length 7 inches. Testes 0.35 inch long. Stomach contained small beetles and bits of transparent yellow skin (caterpillar?)

♂, 12.4.98. Total length 6.8 inches. The stomach contained beetles and the green and black skin of some larva.

94. *NILTAVA CYANOMELÆNA* (Temm.).

This Flycatcher has been obtained about Kuatun by our

men in April, May, September, and October. The different changes of the male plumage are well illustrated in a series of adult and immature males collected in North-west Fohkien and at Foochow.

95. *XANTHOPYGIA NARCISSINA* (Temm.).

Obtained near Kuatun in April and May.

96. *XANTHOPYGIA TRICOLOR* Blyth.

This is an uncommon migrant in Fohkien. Two or three have of late years been shot at Foochow. We obtained a beautiful male shot near Kuatun on the 25th April, 1898. The hunter who shot it said that he saw six or seven that day, but he had mistaken this species for the preceding one, and let them go, thinking we had enough specimens.

97. *CRYPTOLOPHA TEPHROCEPHALA* (Anderson).

Two male examples from Kuatun, shot on the 30th May, 1896, and 15th April, 1897, have been identified at the British Museum as being of this species. The bill from the gape measures 0.58 and 0.60 inch, and the wing 2.25 inches. Another faded bird from the same locality appears to be of the same species. I did not procure any on the last trip to Kuatun. Mr. Ogilvie Grant, after examining my series of Flycatcher-Warblers, informed me that none of them were typical *C. tephrocephala*, so that perhaps this species will have to be taken off our Fohkien list.

98. *CRYPTOLOPHA INTERMEDIA* La Touche.

Thirteen examples vary in length of wing from 1.98 (♂ type) to 2.43 inches. The bill, measured from the gape, varies from 0.52 (♂ type) to 0.58 inch.

The soft parts of two males shot at Kuatun on the 11th April, 1898, are:—Upper mandible brownish; lower mandible yellow; legs dark yellow. Total length 4.9 and 5.1 inches. The stomach contained flies. Testes developing.

The soft parts of a female, shot at Kuatun on the 31st March, 1898, are:—Iris very dark brown; upper mandible brown; lower mandible yellow; legs greenish flesh. Total length 4.4 inches. The stomach contained small beetles.

Another female, shot on the 6th April, 1898, had greenish-yellow legs, faintly tinged with purple.

These Flycatcher-Warblers are common in the forests about Kuatun in the spring. We have also specimens shot there in September. They do not appear to frequent the cleared land, nor did I ever notice them among the flocks of small birds that we saw roaming over the country. They are shy birds, and, although I often saw or heard them, I did not shoot one myself. We did not find the nest.

The specimens of "*Cryptolopha affinis*" recorded in 'The Ibis,' 1892, p. 425, as shot near Swatow in February 1889, were, no doubt, of this species.

99. *CRYPTOLOPHA BURKII* (Burton).

This is the least common of the Flycatcher-Warblers at Kuatun. It occurs there from spring to autumn. I never met with it myself, and only a few have been shot on the various trips to North-west Fohkien. While we were at Kuatun about eight specimens were obtained, one of which has some feathers of the vertex partially grey.

100. *CRYPTOLOPHA RICKETTI* Slater.

This new species is abundant at Kuatun in the breeding-season. Its habits appear to differ from those of the preceding three species. We noticed it among flocks of *Yuhina pallida*, *Staphidia torqueola*, and other small birds in cultivated or open spots, but there were never more than two or three individuals in any one flock. It perches frequently on solitary trees in clearings or cultivated ground, and I shot specimens in the bamboos about the village.

There is always some, and generally a good deal of grey mixed with the yellow and green of the central head-stripe, and the flanks are strongly tinged with green. The soft parts are as follows:—Iris dark brown; upper mandible more or less dark brown, the edges of its base generally yellow; lower mandible yellow; legs pale lead greenish, washed with purple and greyish flesh. Total length 4.4 inches.

Our men found a nest with eggs in 1896, but the eggs were broken and the nest was a mere relic when it reached

reached us. In 1898 we had better luck, and on the 3rd May the collectors found a nest with eggs, which they brought me with the parent bird. It was found in a hole in an earth-bank by a path on the edge of a forest. This nest is a roundish mass of moss, with a small side-entrance, and resembles the nest of *Cryptolopha sinensis*. It is, however, not so deep inside. There is no lining. The outer measurements are 5 inches high by $4\frac{1}{2}$ broad, and 3 inches in depth from front to back. The inner measurements are : diameter $1\frac{3}{4}$ inch, depth of egg-cavity about 1 inch, height about 2 inches. The eggs, six in number, were somewhat incubated ; they are pure white, with a slight gloss ; the shape is ovate, with pointed apex. Two measure $0\cdot63 \times 0\cdot47$ inch, and the four others $0\cdot60 \times 0\cdot47$ inch.

101. *CRYPTOLOPHA SINENSIS* Rickett.

The soft parts in this species are :—Iris dark brown ; upper mandible dark or light brown ; lower mandible yellowish, tipped with brown ; legs greenish yellow. Total length : ♂, 4 inches ; ♀, 3·8 and 3·95 inches.

This pretty little bird is very common about Kuatun. It had already paired when we arrived, at the end of March, and its song, a loud and shrill “chichichi-chiehi,” was one of the most common bird-calls of the country-side. The songster himself was not to be seen, as a rule, except by the sharp-eyed native hunter. We generally met this little bird in underwood on the outskirts of forests, in hedges, and in patches of brushwood in open ground. The nests were being built at the beginning of April. I took the first on the 14th April. The eggs were quite fresh, and during the rest of our stay we took fresh eggs till the 16th May. A few taken between these dates were incubated.

The nest is placed under a hollow bank among the clods on the unearthed roots in the vault of the bank. It is always built well inside, out of sight. Generally the bank chosen is that by a stream ; but we have taken nests from hollow banks some distance from running water. One taken in a valley near Kuatun was by the side of the public road. The

bird will sit pretty close, and is easily captured by placing one's hand quietly and quickly before the entrance-hole. The nest is a more or less rounded matted mass of moss and very fine roots, with a small side-entrance. The outer shape of the nest varies according to its surroundings, and is either roundish, oblong, or quite irregular, often of greater depth (from front to back) than height; but inside it is nearly always the same, the egg-cavity being deep, with a rather small diameter. One nest had the upper part somewhat overlapping the aperture; but as a rule this is quite clear, and the little head of the sitting bird framed in the tiny window, as she looks at you with her large bright eye, is one of the prettiest sights imaginable. The average measurements of eight nests are, outwardly, 5.45×3.40 inches, with a circumference of 11.80 inches. The average inner height is 2.8×1.6 inch in diameter. The aperture in three nests is 1 inch high by 2 broad, in one 1.25 inch high by 1.75 broad, and in another 1 inch high by 2 broad. The length of this entrance-hole, which is dependent on the thickness of the walls, varies somewhat. In one nest it is as much as 2.25 inches, in another 1.75 inch. In a third nest the distance from the entrance to the inner back wall is only 2.5 inches.

The full clutch generally consists of five eggs, but sometimes I have taken a nest with four incubated eggs. The eggs are pure white; the texture is smooth, with a very slight gloss. The shape is variable; an exact ovate is perhaps the most common, but I have a clutch in which three eggs are oval; the eggs of another are a very broad ovate, and one clutch, taken by our men in 1897, consists of four almost globular eggs. The eggs of a clutch are generally all of the same shape.

Four clutches, in which the eggs (one excepted) are ovate, the exception being a somewhat elongated ovate, average each 0.60×0.45 , 0.55×0.45 , 0.55×0.43 , and 0.54×0.45 inch. A clutch of globular or round ovate eggs averages 0.535×0.48 inch; one of three oval and two ovate eggs averages 0.53×0.43 inch, and one of broad ovate eggs averages 0.53×0.45 inch. The eggs in each clutch vary but

little among themselves in size. Those of the large clutch are all of the same size.

102. *CRYPTOLOPHA FULVIFACIES* (Swinhoe).

This little bird is abundant about Kuatun. It was going about in pairs during the whole of our stay, and its melancholy and shrill cry, "dree," was to be heard all over the country in or close to bamboo-groves and plantations. It is a confiding little creature, fond of the neighbourhood of hamlets, and, as it makes its nest in holes of bamboos, readily adopts the nest-holes which the wily Celestial cuts for it in some old piece of bamboo planted in a convenient corner.

I took the first nest of this bird on the 27th April. It was in an old bamboo-stump, stuck upright in the ground, which had originally supported a pole for bamboo-strips. The hole in this bamboo was about 3 feet from the ground. Both sides of the bamboo had been cut open, the division below it broken through, and in the hollow of the joint, just under the circular side-openings, the little bird had made its nest. It was as much as I could do to dislodge the owner; she sat so close that, although I caught hold of her by the tail and lifted her twice off her eggs, she dropped down again at once. At the third attempt I caught hold of the wings as well, drew her out carefully, and, after satisfying myself as to her identity, released her, when she flew to a neighbouring bamboo and chattered at us for some time. There were six eggs, slightly incubated.

The nest is composed of bamboo-leaves set upright round the hollow, and has a lining of coir-fibre. The depth from the bottom of the nest to the opening is 3 inches, the bamboo-leaves reaching the broken-in section of the bamboo. The diameter of the nest is about 2 inches.

Another "trap-nest," placed among the bamboos just below the hunter's house by a Celestial of tender years, surnamed by us the "Money-grabber," had its full clutch of six eggs on the 4th May, and I obtained four other nests of the same kind on the 17th and 19th May with five, five, five, and four eggs respectively.

Our collectors brought back three clutches in 1897, dated 18th April and 5th and 7th May, and another was taken by the natives after their departure and sold to me on our arrival at Kuatun. I could not find a proper *wild nest*, i. e. a nest built otherwise than in an artificially made nest-hole.

The ground-colour of the eggs is a very light reddish pink or pinkish white (pale salmon-colour before blowing). The markings are longitudinal spots, short streaks of irregular width, or small blotches, generally more numerous round the large end, where they are often confluent and form a usually well-marked ring, the rest of the egg being but lightly spotted. In one clutch, however, and in three eggs of another, the ground-colour is so dark as to be a pronounced "old pink," especially in the latter eggs, one of which is very dark indeed, only marked with irregular short lines not much darker than the ground-colour itself. The colour of the surface-marks is a crimson-vermilion, more or less deep, and more or less dulled by the violet-grey blotches which occur chiefly about the larger end of the egg. The general shape is a more or less broad ovate. One egg in my collection is abnormally long, and it has the bulk of its colouring about the apex. It measures 0.60 inch by a little over 0.40. The 28 other eggs that I have range in length from 0.57 inch (one egg) to 0.52 inch (seven eggs), and in breadth between 0.45 inch (one egg) and 0.41 inch (nine eggs). They average 0.54×0.42 inch.

103. TERPSIPHONE INCH (Gould).

We obtained a female on the 6th May, and a white-plumaged male in the forest on the summit of Mount David on the 9th May.

104. TERPSIPHONE PRINCEPS (Temm.).

I have a young bird of this species obtained at Kuatun in October 1896, and three other young birds shot in autumn at Foochow. The only adult specimen as yet obtained is the male recorded by Mr. Rickett (Ibis, 1894, p. 221).

105. HIRUNDO GUTTURALIS Scop.

A few Swallows appeared at Kuatun towards the middle

of April while we were staying there, and one even entered our open sitting-hall and flew round, apparently looking for a suitable corner on which to attach its nest. None, however, remained to breed. I have two examples from Kuatun dated 21st April, 1897, and 20th April, 1898.

106. *COTILE RIPARIA* (Linn.).

The Sand-Martin is not uncommon on the River Min and its affluents. We have nests and eggs taken in February on the Yungfu river. Our collectors shot a few near Shaowufu at the end of November 1895.

107. *CHELIDON CASHMIRENSIS* Gould.

A colony of these Martins nests every year on a precipitous rock on the S.W. slope of some mountains near Kuatun. I visited the place on the 16th May, 1898. The colony was not numerous, and many of the birds were busy feeding their young, so that we only shot a few that we wanted for specimens. Only one pair had built its nest within reach. This had been taken and brought to me on the 27th April, and a scaffolding built up under the rock indicated the spot whence, the day before, the nest of this unfortunate couple had been again cut away for me by the owner of the cliff. The birds had, however, not given up this particular spot, and were still flying up to it, and evidently preparing to build again! While we were there small parties kept refreshing themselves by hovering under the spray of a thin waterfall that fell from the top of the rock.

The nests, so far as we could see, were built under the numerous brick-like projections on the face of the rock. The two nests obtained are shallow cups interiorly, with the entrance in the top corner of the nest. They are made of mud and bits of moss, and are lined with grass-stems and a few feathers. The nest taken on the 27th April measures inside about $4\frac{1}{2}$ inches in diameter by 1 inch in depth; that taken on the 15th May has a diameter of about $3\frac{1}{2}$ inches by 4, the depth of the egg-cavity being about 2 inches.

The four eggs of the nest taken on the 27th April were fresh. In shape they are somewhat elongated ovate. The

colour is pure white and the texture smooth, with a decided gloss. They measure 0.78×0.52 , 0.77×0.52 , 0.75×0.52 , and 0.74×0.52 inch. Mr. Rickett has kindly sent me the measurements of the eggs taken on the 15th May, which are in his collection. These are 0.74×0.52 , 0.73×0.51 , and 0.70×0.51 inch.

The natives and our collectors told us that these Martins arrive early in the spring, and that another kind of Swallow comes to these mountains in June; but they are such swift fliers that our men, on the only occasion that they saw them, were unable to shoot a single specimen. They appear to frequent the wooded summits of the mountains.

108. *HERPORNIS TYRANNULA* Swinhoe.

This pretty bird, which does not appear to be very rare in Central Fohkien, was shot once in the mountains between Shaowufu and Kuatun in December 1895, and I have a specimen dated Kuatun, 11th April, 1897. We did not procure any on this trip.

109. *ZOSTEROPS SIMPLEX* Swinhoe.

Several of these White-eyes were shot by the Kuatun hunters on the 19th April, 1898. These men thought they had got us a very rare bird indeed, and were much disappointed when told that it was such a common bird at Foochow. It seems, therefore, that only a few come up to spend the breeding-season.

We took one nest with four eggs on the 4th May on a thin tea-bush just inside a bamboo-plantation in the Upper Kuatun valley. The eggs are ovate, very pale greenish blue in colour. The texture is rough in one of the eggs, the others being smooth. They measure 0.59×0.48 , 0.58×0.46 , and 0.57×0.45 inch (two).

[To be continued.]